

U1902888099 500

RTA	IFPKQYPIINFITTAGATVQSYTNFIRAVRGRLLTTGADVHRHEIPVLPNRVG	50
GELONIN	GLD-----TVSFSTKGATYITYVNFNLNRVCLKPEGN-SHGIPLLRKKCD	45
RTA	LPINQRFILVELSNHAELSVTLALDVTNAYVVGYNAGNSAYFFHPDNOED	100
GELONIN	DP-GKCFVLVALSNDNGQLAEIAIDVTSVYVVGQVRNRSYFF----KDA	90
RTA	AEAITHLFTDVONRYTFAFGGNYDRLEQLAGNLRENIELGNPLEEAISA	150
GELONIN	PDAAYEGLFKNTIKTRLHFGSTYPSLEG-EKAYRETTDLGIEPLRIGIKK	139
RTA	LYYSTGGTQLPTLARSFIICIONISEAARFQYIEGEMRTRIRYNRRSAP	200
GELONIN	LDENAIIDNYKPTIEASSLLVVIONVSEARFTFIENQIRNN--FQQRIRP	187
RTA	DPSVITLENSWGRSLTAIQESN-QGAFASPIQLQRRNGSKFSYDVVSILI	249
GELONIN	ANNTISLENKWGKLSFOIRTSGANGMFSEAVELERANGKYYVYTAVDQVK	237
RTA	PIIALMVYRCAPPPSSQF	267
GELONIN	PKIALLKFDKDPK	251

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RTA	I-----FPKQYPIINFTTAGATVQSYTNFIRAVRGRLTTGADVREIPV	44
BRIP	AAKMAKNVDKPLFTATFNVOASSAD-YATFIAGIRNKLNPAPHFSNRPV	49
RTA	LPN-RVGLPINORFILVELSNHAELSVTLALDVTNAYVVGYRAGNSAYFF	93
BRIP	LPPVEPNVPPSRWFHVVLKASPTSAGLTLAIRADNIYLEGFKSSDGTWME	99
RTA	HPDNOEDAEAIHTLFTDVQNRYYTFAFGGNYDRLEQLAGNLRENIELGNP	143
BRIP	LTPGLIPGATYV-----GFGGTYRDLTGDTDKL-TNVALGRQQ	136
RTA	LEEASALY-----YYSTGGTOLPTLARSFIICIMISEAARFQ-----YIE	185
BRIP	LADAVTALHGR TKADKASGPKQQQAREAVTTLLVMVNEATRFQTVSGFVA	186
RTA	GEMRTRIRYNRRSAPDPSVITLENSWGRNSTAIQESNOGAFASPIQLORR	235
BRIP	GLLHPKAVEKKGKIGNEMKAQVNGWQDLAALLKTDVKPPPGKSPAKFA	236
RTA	NGSKFSVYDVSILIPITIALMVYRCAP-----PPSSQF	267
BRIP	PIEKMGVRTAEQAANTLGILLFVEVPGGLTVAKALELFHASGGK	280

FIG. 3

FIG. 4

TRICHO D-----VSFRLSGATSSSYGVFISNLRKALPNERKL-YDIPLL--RSS 40

TRICHO LPGSQRYALIHLTNYADETISVAIDVTNVYINGYRAGDTSYFF--NEASA 88

TRICHO TAAKYVFKDAMRKVTLPYSGNYERLQTAAGKIRENIPLGLPALDSAITT 138

TRICHO LFYNNANSA-----ASALMWLIQSTSEARYKFIEQQIGKRV--DKTFLP 181

TRICHO SLAIISLENSWALSLSKQIQIASTNNGQFESPVLINAGNRVTITNVDA 231

TRICHO VVTSNIALLLNRNNMA 247

50

43

100

90

150

138

200

181

248

231

267

263 **FIG. 6**

009128 13 40 93 1 200

RTA	IFPKQYPIINFTTAGATVQSYTNFIRAVRGRLTTGADVRHEIPVLPNRVG	50
MAP	A-PTLETTIASLDLNNPT--TYLSFITNIRTKVADKTE-----QCTIQKIS	42
RTA	LPINQRFILVELSNHAELSVTLALDVTNAYVVGYRA---GNSAYFFHPDN	97
MAP	KTFTQRYSYIDLIVSSTOKITLAIMDADLYVLGYSDIANNKGRAFFFKOV	92
RTA	QEDAEATHLFTDVQNRYYTFAFGGNYDRLEQLAGNLRENIELGNPLEEA	147
MAP	TEAVANNFFPGATGTNRIKLT*TTGSYGDEK-NGGLRKONPLGIFRLENS	141
RTA	ISALYYYSTGGTQLPTLARSFIICIONISEAARFQYIEGEMRTRIRYNRR	197
MAP	IVNIY---GKAGDVKKOAKFFLLAIOMVSEAAARFKYI-SDKIPSEKYEE-	186
RTA	SAPDPSVITLENSWGRSLTAIQESNOGAFASPIQLORRNGSKFSVYDVSI	247
MAP	VTVD EYMTALENNWAKLSTAVYNSKPSTTTATKCOLATSPVTISPWIFKT	236
RTA	LIPITIALMVYRCAPPPSSQF	267
MAP	VEEIKLVMGLLKSS	250

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RTA	IFPKQYPIINFITTAGATVQSYTNFIRAVRGRLTTGADVRHEIPVLPNRVG	50
PAPS	I-----NTITFDAGNATINKYATFMESLRNEAKDPSLKCYGIPMLPNTNS	45
RTA	LPINQRFILVELSNHAELSVTLALDVTNAYVVGYRAGNSA-----YFFHP	95
PAPS	---TIKYLKLGASLKTITMLRRNNLYVMGYSDPYDNKCRYHIFNDI	92
RTA	DNOEDAEAITHLFTDVONRYT--FAFGGNYDRLEQLAG--NLRENIELGNG	142
PAPS	KGTEYSDVENTLCPSSNPRVAKPINYNGLYPTLEKKAGVTSRNEVOLGIQ	142
RTA	PLEEIASALYYSTGGTQLPTLARSFIICIONISEAARFQYIEGEMRTI	192
PAPS	ILSSDIGKI--SGQGSFTEKIEAKFLVAIOMVSEAARFKYIENQVKTN-	189
RTA	RYNRRSAPDPSVITLENSWGRSLTAIQESNOGAFASPIQLORRNGSKFSV	242
PAPS	-FNRDFSPNDKVDLEENWGKISTAIHNSKNGALPKPLELKNADGTKWIV	238
RTA	YDVSILIPIIALMVYRCAPPPSSQF	267
PAPS	LRVDEIKPDVGLLNY--VNGTCOAT	261

SAP6 V-----TSITLDLVNPTAQQYSSFVDKIRNNVKDPNLKYGGTDI--AVIG 43

SAP6 PPSKEFLRINFOSSRG-TVSLGLKRDNLVVAYLANDNTNVNRAYFRS 92

SAP6
EITSAESTALFPEATTTANKALEYTEDYOSIEKNAQITGDDSRKELGLG 142

SAP6 IDLLSTSMEAV---NKKARVVKDEARFLLIAQNTAEAAARFRYTONLVK 189

SAP6 N--FPNKFNSENKVIQFEVNWKKISTAIYGDAKNGVFNKDYDFGFGKVRQ 237

SAP6 VKDLONGLL-----MYLGKPKSSNEAN 259

FIG. 10A

```
pos      60      70      80      90     100    110
bind -oooo+o+o+o+-+o+o+o+++++++-----O++++++
bury =O=+O-+O-+-+O+O+O+-+--+---OOOOO==--+=O-+-+
mod   ••••••••••••••••••••••••••••••••••••
hh3   xyadSVKGRFTISRddSKNTlyLqMnsLraeDTAvVYCarxxxxxxxWGgTlVTvSS
hh1   xyapxfqgrVTxtRdxSxntayMeLxsLrseDtAvVYCARxxxxxxxxxxwgGtlvtvSS
hh2   xyxtslsrltiskdtsknqvvlxxxxxdpxdtatyycarxxxxxxxxdvwgggttvtvss
```

FIG. 10B

FIG. 11A

JK1-HindIII
GTT TGA TTT CAA GCT TGG TGC

FIG. 12A

FIG. 12B